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MEMORANDUM FOR: [ ] Executive Assistant/DS&T  
[ ] Special Assistant for  
Imagery/DI  
Chief, Intelligence Community Affairs/OGC

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FROM: [ ] Legislation Division  
Office of Congressional Affairs

SUBJECT: Commercial Space Launch Act Amendments of  
1988, H.R. 4399

1. On 24 May 1988, the House of Representatives passed the  
above-captioned bill, formerly H.R. 3765. Attached is a copy  
of the bill as passed as well as the debate.

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2. Should you have any questions, please telephone me on

[ ]  
Attachment

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acquired in Idaho, it is anticipated that they will include several critical areas along the South Fork of the Snake River which are deemed to protect this unique natural resource. The owner of the Grand Targhee Resort is now negotiating with the current owner, of these private tracts in Idaho, in order to facilitate the exchange. The bill would require that the exchanged lands be of equal or nearly equal value, with any difference in values to be covered by a cash payment not to exceed 25 percent of the total values of the lands involved.

Mr. Speaker, this bill and the land exchange it would authorize, would result in minimal cost to the Government while providing significant benefits to the residents of both Idaho and Montana. Expansion of the Grand Targhee Resort will provide substantial economic benefit to the residents of the area, and especially for those in Driggs, ID, which is located just 9 miles west of the resort. At the same time, acquisition of critical lands along the South Fork of the Snake River will preserve the fish and wildlife habitat and scenic qualities of the area, and ensure public access to the river.

Since the gentleman from Idaho [Mr. STALLINGS] first unveiled this proposed land exchange, the committee staff has worked closely with his Washington, DC, and district office staff to prepare the necessary legislation. The Subcommittee on Forests, Family Farms, and Energy held field hearings in Driggs, ID, on April 16, 1988, as well as a hearing in Washington, DC, on April 27. Support for H.R. 4028 was strong from all those affected. Mr. STALLINGS is to be commended for his efforts.

Mr. Speaker, H.R. 4028 was considered by the subcommittee on April 27, 1988, and by the full Agriculture Committee on May 5, 1988. The bill was favorably reported without amendment. I recommend its immediate passage.

Mr. CHENEY. Mr. Speaker, I have no further requests for time, and I yield back the balance of my time.

Mr. VENTO. Mr. Speaker, I would again like to thank the gentleman from Texas [Mr. DE LA GARZA], the chairman of the Committee on Agriculture.

I think that this is a good proposal. I know of no objection to it. It meets the standards of the Forest Service for equal value exchange, and it will help the economy of the great State of Idaho. It is a proposal that has been properly structured and follows appropriate procedures and I hope the House will act favorably on this measure.

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Mr. Speaker, I have no further requests for time, and I yield back the balance of my time.

The SPEAKER pro tempore (Mr. MONTGOMERY). The question is on the motion offered by the gentleman from Minnesota [Mr. VENTO] that the House suspend the rules and pass the bill, H.R. 4028.

The question was taken; and (two-thirds having voted in favor thereof) the rules were suspended and the bill was passed.

A motion to reconsider was laid on the table.

### COMMERCIAL SPACE LAUNCH ACT AMENDMENTS OF 1988

Mr. ROE. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 4399) to facilitate commercial access to space, and for other purposes.

The Clerk read as follows:

H.R. 4399

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

#### SECTION 1. SHORT TITLE; FINDINGS.

(a) This Act may be cited as the "Commercial Space Launch Act Amendments of 1988".

(b) The Congress finds that—

(1) a United States commercial space launch industry is an essential component of national efforts to assure access to space for Government and commercial users;

(2) the Federal Government should encourage, facilitate, and promote the use of the United States commercial space launch industry in order to continue United States aerospace preeminence;

(3) the United States commercial space launch industry must be competitive in the international marketplace;

(4) Federal Government policies should recognize the responsibility of the United States under international treaty for activities conducted by United States citizens in space; and

(5) the United States must maintain a competitive edge in international commercial space transportation by ensuring continued research in launch vehicle component technology and development.

#### SEC. 2. DEFINITION.

Section 4 of the Commercial Space Launch Act (49 U.S.C. App. 2603) is amended—

(1) at the end of paragraph (10), by striking "and";

(2) by redesignating paragraph (11) as paragraph (12); and

(3) by inserting after paragraph (10) the following new paragraph:

"(11) 'third party' means any person or entity other than—

"(A) the United States, its agencies, its personnel involved in launch services, or its contractors or subcontractors involved in launch services;

"(B) the licensee;

"(C) the licensee's contractors, subcontractors, or customers involved in launch services; or

"(D) any such customer's contractors or subcontractors involved in launch services; and"

#### SEC. 3. DEFINITION OF DIRECT COSTS.

(a) Section 15(b)(1) of the Commercial Space Launch Act (49 U.S.C. App. 2614(b)) is amended by inserting at the end the following: "For purposes of this paragraph, the term 'direct costs' means the actual costs that can be unambiguously associated with a commercial launch effort, and would not be borne by the United States Government in the absence of a commercial launch effort."

(b) Section 15(a) of the Commercial Space Launch Act (49 U.S.C. App. 2614(a)) is amended by adding at the end the following new sentence: "In taking such actions, the Secretary shall take into account the commercial availability on reasonable terms and conditions of substantially equivalent

launch property or launch services from a domestic source."

(c) Section 15 of the Commercial Space Launch Act (49 U.S.C. App. 2614) is amended by adding at the end the following new subsection:

"(d) For the purposes of this section, launch services shall include activities involved in the preparation or production of a launch vehicle and its payload for launch and the conduct of a launch."

#### SEC. 4. INSURANCE REQUIREMENTS OF LICENSEE.

(a) Section 16 of the Commercial Space Launch Act (49 U.S.C. App. 2615) is amended by striking "Sec. 16." and all that follows through "other appropriate agencies." and inserting in lieu thereof the following:

"Sec. 16. (a)(1)(A) Each license issued or transferred under this Act shall require the licensee—

"(i) to obtain liability insurance; or

"(ii) to demonstrate financial responsibility

in an amount sufficient to compensate the maximum probable loss, as determined by the Secretary, from claims by a third party for death, bodily injury, or loss of or damage to property resulting from activities carried out under the license. In no event shall a licensee be required to obtain liability insurance or demonstrate financial responsibility under this subparagraph in an amount which exceeds either \$500,000,000 or the maximum liability insurance available on the world market at a reasonable cost, whichever is less.

"(B) Each license issued or transferred under this Act shall require the licensee—

"(i) to obtain insurance; or

"(ii) to demonstrate financial responsibility

in an amount sufficient to compensate the maximum probable loss, as determined by the Secretary, from claims against any party by the United States for loss of or damage to property of the United States resulting from activities carried out under the license. In no event shall a licensee be required to obtain insurance or demonstrate financial responsibility under this subparagraph in an amount which exceeds either \$100,000,000 or the maximum insurance available on the world market at a reasonable cost, whichever is less.

"(C) Each license issued or transferred under this Act shall require the licensee to enter into reciprocal waivers of claims with its contractors, subcontractors, and customers, and the contractors and subcontractors of such customers, involved in launch services, under which each party agrees to be responsible for any damage it sustains or for any injury to its own employees resulting from activities carried out under the license.

"(D) The Secretary, on behalf of the United States, its agencies, personnel involved in launch services, and contractors and subcontractors involved in launch services, shall enter into reciprocal waivers of claims with the licensee, its contractors, subcontractors, and customers, and the contractors and subcontractors of such customers, involved in launch services, under which each party agrees to be responsible for any damage it sustains or for any injury to its own employees resulting from activities carried out under the license. Any such waiver shall apply only to the extent that claims exceed insurance or self-insurance pursuant to subparagraph (B), unless any such claim involves the willful misconduct or reckless disregard of the United States, in which case the United States shall waive its right to recover any damages under subparagraph (B).

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"(2) Any insurance policy obtained or demonstration of financial responsibility made pursuant to a requirement described in paragraph (1) shall protect the United States, its agencies, personnel, contractors, and subcontractors, and all contractors, subcontractors, and customers of the licensee, and all contractors and subcontractors of such customers, involved in providing the launch services, to the extent of their potential liabilities, at no cost to the United States.

"(3) The Secretary shall determine the maximum probable loss associated with activities under a license within 90 days after a licensee has requested such a determination and has submitted all information the Secretary requires to make such a determination. The Secretary shall amend such determination as warranted by new information.

"(4) The Secretary shall, within 3 years after the date of the enactment of the Commercial Space Launch Act Amendments of 1988, and once every year thereafter, review the amounts specified in the last sentence of subparagraphs (A) and (B) of paragraph (1), and shall submit a report to the Congress which contains a proposed adjustment to such amounts to conform with altered liability expectations and worldwide availability of insurance. Such proposed adjustment shall take effect 30 days after the submission of such report.

"(b)(1) The Secretary shall provide for the payment of successful claims (including reasonable expenses of litigation or settlement) by a third party against the licensee, or its contractors, subcontractors, or customers, or the contractors or subcontractors of such customers, resulting from activities carried out pursuant to a license issued or transferred under this Act for death, bodily injury, or loss of or damage to property, but only to the extent that such claims are not compensated by insurance, including self-insurance pursuant to subsection (a)(1)(A)(ii). This paragraph shall not apply to claims resulting from the willful misconduct of such parties.

"(2) Payment of claims under paragraph (1) shall be subject to—

"(A) notice to the United States of any claim or suit against a party described in paragraph (1) for death, bodily injury, or loss of or damage to property; and

"(B) control of or assistance in the defense by the United States, at its election, of that claim or suit.

"(3) The Secretary may withhold payment under paragraph (1) if the Secretary certifies that the amount is not just and reasonable, except that the amount of any claim determined by the final judgment of a court of competent jurisdiction shall be deemed by the Secretary to be just and reasonable.

"(4) Claims under paragraph (1) shall be deemed to be claims against the United States, and the Secretary shall pay such claims under section 1304 of title 31, United States Code."

(b) Section 15(c) of the Commercial Space Launch Act (49 U.S.C. App. 2614(c)) is amended to read as follows:

"(c) The Secretary may establish requirements for proof of financial responsibility and such other assurances as may be necessary to protect the United States and its agencies and personnel from liability, loss, or injury as a result of a launch or operation of a launch site involving Government facilities or personnel. The Secretary may not under this subsection relieve the United States of liability for damage or injury resulting from the reckless disregard or willful misconduct of the United States or its agents."

# LAUNCH VEHICLE RESEARCH AND DEVELOPMENT

The requirements of section 15(b) of the Commercial Space Launch Act shall not apply to eligible satellites.

The United States shall not require payment from the licensee or customer of the licensee for the provision of launch property, launch services, or launch sites required in connection with the commercial launch of an eligible satellite.

(c) A satellite shall be eligible for the purposes of this section if—

(1) it was under construction on August 15, 1986;

(2) an unperformed launch services agreement or contract with the National Aeronautics and Space Administration was held with respect to it on August 15, 1986; and

(3) it is licensed for launch under the Commercial Space Launch Act.

## SEC. 6. PREEMPTION OF SATELLITES.

Section 15(b) of the Commercial Space Launch Act (49 U.S.C. App. 2614(b)) is amended by adding at the end the following new paragraph:

"(4)(A) The Secretary of Transportation, with the cooperation of the Secretary of Defense and the Administrator of the National Aeronautics and Space Administration, shall take steps to ensure that the launches of satellites with respect to which a launch date commitment from the United States has been obtained for a launch licensed under this Act are not preempted from access to United States launch sites or property except in cases of imperative national need. Any determination of imperative national need shall be made by the Secretary of the Air Force or the Administrator of the National Aeronautics and Space Administration and shall not be delegated.

"(B) The Secretary of the Air Force or the Administrator of the National Aeronautics and Space Administration, as the case may be, shall report to the Congress within 7 days after any determination of imperative national need under subparagraph (A), including a full explanation of the circumstances justifying such determination and a schedule for ensuring the prompt launching of a preempted satellite."

## SEC. 7. STUDY OF PROCESS FOR SCHEDULING LAUNCHES.

The Secretary of Transportation, in cooperation with the Secretary of Defense and the Administrator of the National Aeronautics and Space Administration, and in consultation with representatives of the space launch and satellite industry, shall study ways and means of scheduling Government and commercial payloads on commercial launch vehicles at government launch sites in a manner which—

(1) optimizes the use of the launch property of the United States; and

(2) assures that the launch property of the United States that is available for commercial use will be available on a commercially reasonable basis,

consistent with the objectives of the Commercial Space Launch Act. The Secretary shall submit the results of such study to the Congress within 120 days after the date of the enactment of this Act.

## SEC. 8. COMMERCIAL SPACE LAUNCH SERVICE COMPETITION.

It is the sense of the Congress that the United States should explore ways and means of developing a dialogue with appropriate foreign government representatives to seek the development of guidelines for access to launch services by satellite builders and users in a manner that assures the conduct of reasonable and fair international competition in commercial space activities.

# LAUNCH VEHICLE RESEARCH AND DEVELOPMENT

The Administrator of the National Aeronautics and Space Administration, in consultation with representatives of the space launch and satellite industry, as appropriate, shall support research into launch systems component technologies, for the purpose of developing higher performance and lower cost United States launch vehicle technologies and systems available for the launch of commercial and Government spacecraft into orbit. The Administrator shall submit a report outlining such activities to the Congress within 120 days after the date of the enactment of this Act.

## SEC. 10. APPLICABILITY TO LICENSES.

This Act, and the amendments made by this Act, shall apply to all licenses issued under the Commercial Space Launch Act before or after the date of the enactment of this Act.

The SPEAKER pro tempore. Pursuant to the rule, a second is not required on this motion.

The gentleman from New Jersey [Mr. ROE] will be recognized for 20 minutes and the gentleman from New Mexico [Mr. LUJAN] will be recognized for 20 minutes.

The Chair recognizes the gentleman from New Jersey [Mr. ROE].

Mr. ROE. Mr. Speaker, I yield myself such time as I may consume.

(Mr. ROE asked and was given permission to revise and extend his remarks.)

Mr. ROE. Mr. Speaker, I rise in support of this important legislation approved with the strong bipartisan support of the Committee on Science, Space, and Technology.

May I say at this time I want to pay high regard and appreciation to the gentleman from New Mexico, Mr. MANUEL LUJAN, our ranking minority member on the committee, the gentleman from Florida [Mr. NELSON], the chairman of the Subcommittee on Space Science and Applications, and the gentleman from Pennsylvania [Mr. WALKER], the ranking minority member on that committee.

The legislation will ensure that a commercial launch industry takes its place as a significant component of the U.S. space transportation system. This is an important step in our space recovery efforts through a mixed fleet launch policy that can assure access to space for all users. In our recent multiyear authorization bill for our space program, we have explicitly recognized that expendable launch vehicles are essential to the core space effort.

One of the most compelling lessons of the devastating *Challenger* tragedy was the sudden awareness that, as a nation, we had depended—to our national detriment—solely on the space shuttle as the launch means for all government and commercial users. Since 1986, the administration has aggressively taken steps to purchase ELV services to launch Government satellites.

Commercial users have not had such a choice. In August 1986, the President announced—through National Security

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ty decision directed by the President and NASA's launch role in the domestic and foreign satellite market. The impact of this decision was substantial. For over 20 years, NASA was the sole provider of launch services for government and commercial users. As a result of this directive, American satellites have had to choose between a fledgling U.S. commercial launch industry or launching on foreign vehicles. At the time of the Presidential directive, 44 satellite companies held launch services agreements with NASA.

Let me amplify on the commercial launch choices available today and why this legislation is urgently needed. To date, there has not been a single U.S. commercial launch since the shuttle, although we hope that with this legislation, commercial launches will begin early in 1989. The U.S. launch industry steps into an aggressive and sophisticated foreign launch market. In 1985, Arianspace, a private European launch consortium, was competing head on with shuttle to the extent of 50 percent of the world shuttle market. Today, the Chinese and Soviet Union have joined the Europeans in actively marketing launch services to the West.

A year following the President's decision ending NASA's commercial launch role, the Committee on Science, Space, and Technology initiated an extensive series of hearings designed to identify impediments to the startup of an American launch industry. We have received extensive testimony from the providers and users of launch services in an effort to bring about a competitive launch industry.

H.R. 4399 is the result of this extensive review of the 1984 Commercial Space Launch Act, which set up the regulatory framework for licensing commercial launches and the post-Challenger policies affecting the U.S. launch and satellite industries.

I would like to point out to my colleagues that the space program is not some extravagant hobby—it is essential to our economy, our national security and our technological leadership. This bill is not some idle exercise in legislative drafting—it is essential to our space effort.

We are now in a very desperate situation. We have a backlog of commercial, defense, and scientific satellites that must be launched on expendable launch services. This bill provides the bare necessities for the U.S. private sector to stay in the expendable launch vehicle market. Our competition is strong. The Europeans, Japanese, Chinese, and even the Soviets are also vying for dominance in this market. They certainly recognize its importance and they are right.

The administration has likewise struggled with this issue, but in my view, the practical importance of their debate has been subjugated to a broader ideological agenda to reform our tort process. H.R. 4399 is not an exercise in tort reform, it is a bill to

get on with the job of getting us back into space.

I hope my colleagues will join me in giving this bill our complete support. We must send the private sector and the world community a strong message. Our message should be that we know where we are going and we know what it takes to get us there.

I urge a speedy adoption of H.R. 4399.

The major features of this legislation are as follows:

The bill establishes an important risk allocation framework similar to government policies in conjunction with commercial use of the space shuttle.

For more than 20 years, NASA provided satellite launches on the space shuttle and expendable launch vehicles. An important feature of this arrangement was the risk allocation scheme for apportioning risks between NASA and its customers that recognized the inherent risks of launch activity. Generally, NASA required customers to assume a reasonable share of the risks along with the agency by requiring the customer to obtain the maximum available liability insurance at reasonable cost and to name the U.S. Government, at no cost to it, as insured for claims that might arise as a result of a launch accident. In return, NASA, under section 308 of the Space Act, assumed responsibility for claims exceeding insurance levels. NASA and the parties to the launch also entered into cross waivers under which parties relieved each other of liability for damage to property, each party agreeing to be responsible for their own property.

This successful practice of risk allocation between launch providers and customers has been adopted and is in use by foreign launch providers today. Today, Arianspace requires customers to obtain about \$60 million of liability coverage, above which Arianspace assumes the risk. It is not available today to the U.S. launch industry.

H.R. 4399 recommends that a risk allocation approach similar to the NASA precedent be extended to the emerging U.S. commercial launch industry. In this regard, the committee has recommended a statutory standard for the determination of property and liability insurance requirements on the basis of the "maximum probable loss" that could result from activities conducted pursuant to a launch license. An important feature of this standard is that individual risk determinations can be made on the basis of the launch vehicle size and type; launch site and trajectory; and payload characteristics. This maximum probable loss determination would thus constitute a reasonable requirement to cover liability and government property concerns.

Specifically, the launch provider, on behalf of all parties to the launch, would obtain liability insurance to cover the maximum probable loss of activities conducted under the launch

license, as determined by the DOT Secretary, but such insurance would not exceed the lesser of: First, \$500 million; or second, the maximum liability insurance available in the world market at reasonable cost, as determined by the Secretary. In recommending the \$500 million ceiling, the committee is mindful that: First, no launch accident in history has resulted in third party liability claims; second \$500 million evolved as the standard insurance requirement for commercial customers of the shuttle; and third, the maximum liability insurance available in the market today is between \$300-\$500 million. Under the bill, the level will be reviewed periodically by the DOT Secretary to ensure it is consistent with changed liability expectations and worldwide insurance capacity.

The insurance policy obtained will name as insured all parties to the launch, including the United States, its agencies, personnel, contractors and subcontractors, at no cost to the Government. Under this protocol, the United States ensures that its obligations to the world community are met. These commitments include the Outer Space Treaty and the Convention on International Liability for Damage Caused by Space Objects, under which the United States, as a "launching state," shall be absolutely liable to pay compensation for damage caused by its space objects on the surface of the Earth or to aircraft in flight.

In keeping with these international treaty obligations, and following the NASA shuttle precedent under which NASA indemnified shuttle users against third party liability over and above available insurance, the legislation obligates the Secretary of Transportation to provide for the payment of successful claims under the judgment fund section 1304 of title 31, United States Code by a third party against the licensee; that is, launch provider, and parties to the launch, as defined in the bill. This authority would not apply to claims resulting from willful misconduct. The bill also contains specific procedural safeguards to protect the Government. The result is a reasonable quid pro quo consistent with the public interest.

To ensure appropriate insurance coverage for Government property, the bill requires a launch provider to obtain insurance to cover the maximum probable loss—taking into account launch vehicle size and type; launch site and trajectory; and payload characteristics—to Government property as a result of activities carried out under a launch license. Such insurance shall not exceed the lesser of: First, \$100 million; or second, the maximum available insurance in the world market at reasonable cost. Consistent with the President's space policy of January 1988, the Government and parties to the launch would enter into cross waivers, each agreeing

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to be responsible for any further damage to property. In recommending this level, the committee was mindful of the fact that, first, no launch accident involving an expendable launch vehicle has resulted in more than \$60 million in damages to Government property; second, \$100 million reflects the upper limits of what is currently available in the world market; and third, the Government, as regulator of the industry and manager of the launch ranges, is significantly in control of the launch. This maximum level on insurance responsibility will also be reviewed periodically by the DOT Secretary.

The bill establishes important ground rules for use of Government ranges.

Unless commercial users can be assured of reliable and predictable access to Government launch ranges, the U.S. launch industry will not be considered as reliable and U.S. Government policies to promote this industry will not be taken seriously.

The bill recognizes the importance of Government reliability by prohibiting Government preemption of commercial launches, with one exception. In the event of a finding of imperative national need, which would be required to be determined at the level of the NASA Administrator or the Secretary of the Air Force, preemption for exigent circumstances of imperative national security need or civilian requirements could be accommodated. In this event, the NASA Administrator and the Secretary of the Air Force, as the case may be, would be required to report such circumstances to the Congress within 7 days and include a schedule for the prompt launching of a preempted satellite.

The bill establishes one-time launch incentives for satellites bumped from the space shuttle.

When the President announced in August 1986 that NASA would no longer launch commercial satellites, 44 companies held launch services or letter agreements with NASA under which the space shuttle was committed to meet customer launch requirements. Of these, 22 satellites were under construction at the time. In public testimony, representatives of the U.S. satellite industry shared that Government representatives continued to provide assurances that such contractual commitments would be honored to satisfy launch requirements, either by shuttle or special procurement of ELVs.

At the committee's hearings held over a year following the policy decision, no U.S. satellite company had yet succeeded in obtaining a fixed cost or firm launch date for a launch with a U.S. launch provider. Much of the cost and schedule uncertainty has resided in the U.S. Government, manager of the launch ranges.

H.R. 4399 recognizes the policy reversal and its implications for the satellite communications industry through the creation of launch incen-

tives that would be available to such customers who are not "American." The committee believes that the Government should support certain limited activities in support of a U.S. commercial launch of an eligible satellite. The use of these services is nominal and will not make such customers whole again. The committee anticipates that between 7-12 satellites will take advantage of these incentives.

First, the bill would waive requirements for eligible satellites to obtain insurance to protect against damage to Government property. These customers of the shuttle would not have obtained insurance to launch on the space shuttle, and the committee has applied such a waiver for these customers on a U.S. expendable.

The bill would waive charges for U.S. launch property and services provided in support of a U.S. commercial launch. These entail associated support services such as operations, maintenance, and range support activities that were not historically charged directly to customers of the shuttle.

The issue here involves fundamental fairness. The committee has recognized a damaging policy decision and has developed incentives that will provide a partial and productive remedy in the form of a stimulus to the U.S. commercial launch industry.

The bill addresses the long-term competitiveness of the U.S. launch industry by directing NASA to support research into launch systems component technologies.

The success of the U.S. aviation industry is in large part due to the successful Government-industry relationship in aeronautics research. The committee believes that if the U.S. launch vehicle industry is to be competitive in the long term, such a relationship should be forged in launch vehicle component technology similar to the historical aeronautics model. The bill directs the Administrator of the National Aeronautics and Space Administration to support research into launch systems component technologies and to consult with industry in order to facilitate the transfer of technology to the commercial sector.

The bill expresses the sense of Congress that the United States should develop a dialog with foreign governments to seek guidelines for reasonable and fair international competition in commercial space activities.

The U.S. launch industry is entering a competitive launch competition in which foreign governments are actively supporting their industries. The growing trend toward "turnkey" services, or procurement of a satellite delivered in orbit, reflects a truly international marketplace. The result is that U.S. policy decisions affecting commercial space activities would be substantially validated through a process involving our friends.

The bill therefore expresses the sense of Congress that the United

States should explore a dialog with appropriate foreign governments to address competition in launch and satellite services to seek the establishment of guidelines that assure reasonable and fair competition in commercial space activities.

This bill fills an important gap in our efforts to bring about a commercial launch industry. It is strongly supported by the U.S. launch and satellite industries, and has been developed in close consultation with them. I urge its rapid adoption.

Mr. LUJAN. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I rise in support of H.R. 4399. This legislation has the support of virtually every element of the space community. I think most Members would agree that the Nation benefits from a strong commercial sector. In fact the concept of "space commercialization" has become almost synonymous with apple pie; you can't really not like it. The only issue has been: "How do we get there from here?"

Historically the Space Program has been Government funded and Government managed, and the transition to the private sector has been a bumpy road, as the Landsat experience has demonstrated.

On the other hand, the communications satellite industry has been hailed as a commercial success and an example of what the private sector can do. It's also an example of the benefits of cooperation between the Government and the private sector.

When the *Challenger* accident grounded the shuttle fleet, it became obvious that the shuttle would never be the universal launch vehicle that it was advertised to be and we realized that we needed a more versatile space transportation system. It was an expensive lesson but we learned that we need more than one way to get into space.

As long as NASA was providing heavily subsidized shuttle launches to commercial users, there was no possibility of developing a commercial launch industry; but today, the situation is different. Today we have three major aerospace firms who are interested in competing for the foreign and domestic commercial launch market. This is a healthy competitive situation but major impediments to commercial success still exist.

The importance of a domestic launch capability should be clear to everyone. Dependence on foreign launch providers is not an acceptable option. We need to ensure that the U.S. commercial launch industry survives.

Historically, the Government has been the sole provider of launch services in this country and customers were not required to pay the full cost. The cost of the infrastructure necessary to support these launches was paid for by the Government; more-

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over, the Government shared the risk with the customer. Foreign competitors still offer similar arrangements. What this bill does is try to at least partially level the playing field for U.S. launch companies by providing equitable arrangements for commercial use of Government facilities and also what I believe is an equitable approach to risk sharing.

I am aware that there are critics of this bill who would prefer a cap on liability in lieu of indemnification. While I might agree that in some instances a cap on liability claims would be appropriate, I see nothing in the approach taken in the bill that is cause for alarm.

This legislation does not ask the Government to assume any greater risk than it was assuming before. When an activity is clearly in the national interest as this is, it's entirely appropriate for the Government to share the risk. Moreover, there is a precedent for this type of risk sharing in the nuclear energy industry.

This bill also has other provisions aimed at ensuring that our ELV industry survives in this highly competitive market. This legislation authorizes NASA to undertake an R&D program in launch systems technology. This effort will parallel work they've done for the aeronautics industry. NASA's Aeronautic Research and Technology Program has been instrumental in maintaining U.S. preeminence in aeronautics and a similar role in space transportation technology is essential to the long-term competitiveness of the U.S. launch industry.

Mr. Speaker, I believe this legislation is vital to the success of a domestic commercial launch industry, and a healthy domestic launch industry is a critical element of the U.S. Space Program. We can no longer afford to have the U.S. Government be the sole provider of launch services and we certainly can no longer rely on the shuttle to provide our only access to space.

Mr. ROE. Mr. Speaker, I yield such time as he may consume to the gentleman from Florida (Mr. NELSON), the distinguished chairman of our Subcommittee on Space Science and Applications.

Before he proceeds, may I thank him very much for his leadership and the excellent job he and the gentleman from Pennsylvania (Mr. WALKER) have done in the work they have carried out in bringing this legislation before the committee.

Mr. NELSON of Florida. Mr. Speaker, it is indeed a privilege that I can only return the compliments to the chairman and the gentleman from New Mexico, the ranking minority member, for the excellent working relationship that the gentleman from Pennsylvania (Mr. WALKER) and I have been privileged to have as we try to sort through the Nation's Civilian Space Program and try to get our Space Program back on track.

Mr. Speaker, I rise in support of H.R. 4399, to facilitate commercial access to space, and for other purposes.

As the primary sponsor of the bill, I want to concur fully with the chairman of the full Committee on Science, Space, and Technology in his remarks. I also want to point out to all Members that the legislation enjoys strong bipartisan support, thanks to the strong and able leadership of the gentleman from New Mexico (Mr. LUJAN) and the gentleman from Pennsylvania (Mr. WALKER). We are partners in forging this legislation that is absolutely critical if the United States is going to have a competitive commercial launch industry.

In 1984, the Congress approved legislation to establish a regulatory framework for commercial launch activities following a national policy decision to get the Government out of the ELV business. Nearly 4 years later, we have yet to experience a commercial launch in this country. The delay is due primarily to regulatory delays caused by a lack of seriousness in the administration toward this new industry. Implementation has been mired by agencies competing for the responsibilities given to the Department of Transportation, the agency charged with regulating this new industry.

After the *Challenger* accident, the President decided to ban commercial satellites from the space shuttle in order to create a market for the U.S. launch industry. U.S. satellite customers faced a fledgling U.S. launch industry or a choice among various eager and capable foreign launch providers. There was little reason to believe that the U.S. Government would be any more reliable in providing access to the commercial launch industry for commercial purposes than it has been in its relations with the satellite communications industry.

A year after the President's August 1986 policy decision, our committee conducted hearings to review the state of the domestic launch industry. The committee learned that no satellite customer had been able to obtain a firm cost quote or launch date from a U.S. launch provider. The reason? The reason is because of delay and disorganization within the administration.

U.S. launch providers and satellite customers testified of a policy near collapse, due to either neglect, or individual agency recalcitrance to accommodate the launch needs of the commercial sector. Moving toward a commercially provided service after over 20 years of Government provided launch services would not be easy, and we surveyed our choices as a nation:

Should we reconsider use of the space shuttle for commercial satellite launchings? The Nation could not justify risking human lives for routine satellite launchings.

Should the Government launch commercial satellites on expendable launch vehicles? The Government was

overwhelmed in an effort to obtain ELV's to meet scientific and defense requirements, and several commercial launch providers were making serious investments in an effort to enter the market.

Public testimony in the fall of 1987 revealed that the administration's policy implementation was not effective, and that further delays threatened the viability of the U.S. launch and satellite industries. In the face of foreign launch competition involving the active support of foreign governments, the United States faced considerable risks not only to the future of its launch industry, but to the U.S. satellite industry as well. H.R. 4399 fills the important gaps identified by U.S. launch providers and satellite users that will ensure the United States builds a domestic launch industry that is competitive worldwide.

Let me talk about this foreign competition:

Arianespace, the European launch consortium involving 36 European aerospace companies and 13 banks, successfully cut into 50 percent of the world satellite market in competition with shuttle by 1985. Several American companies rely on the Ariane for access to space. This year, Ariane 4, a new, more capable vehicle, will launch, giving the Europeans the capability of launching up to 4,200 kilograms to geostationary orbit. Ariane continues to develop more powerful launch vehicles in order to launch heavier payloads.

The Soviet Union is actively marketing launch services to the West on its Proton vehicle. U.S. satellite owners have been quoted prices on the Proton at a level U.S. launch providers cannot meet. Although current United States policy prohibits the export of United States technology to the Soviet Union, the Commerce Department recently granted an export license to place a commercial United States experiment on the Soviet space station Mir.

The People's Republic of China is also actively marketing launch services on its Long March vehicle, and at cut-rate prices. As a matter of policy, China has stated it will underprice its launches in order to ensure the attractiveness of its services. United States trade policy toward the Chinese is certainly more favorable to the Chinese, and requests for export licenses will be reviewed on an individual basis. To date, no company has requested an export license, although several have received Government approval to negotiate terms and conditions with the Chinese. Several international competitions for satellite services underway today may force early determination of United States policy toward use of the Chinese Long March.

If the United States Government allows American satellites on the Proton or the Long March under the current terms and conditions being offered by the Soviet Union or the Chi-

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nese, the American launch industry will face an unbeatable competition. I am certain that Congress will not pass any such prospect.

Japan's launch capability is in development. Currently, their N-I and H-1 launch vehicles—which were developed from American technology—meet domestic needs, however, plans are proceeding to develop a new H-2 launch vehicle that will not use United States technology and therefore Japan's marketing plans will not be constrained. Japan's plans for marketing the H-2 to the West, which would be available in 1992, remain unclear at this time.

Clearly, the field of foreign launch competitors is formidable. Moreover, international competition in satellite service has evolved into the procurement of "turnkey" services; that is, a satellite customer obtains a satellite delivered in orbit. The Soviet Union has already offered the total launch package, including satellite and ground stations, in competitions. If the United States has no commercial launch industry, it may be only a matter of time before we would lose both the launch and the satellite industries to off-shore competition.

Mr. Speaker, I believe the United States has a choice to make in this international arena. Our choice is to keep the launch and the satellite business in this country. We need the commercial launch industry for both Government and commercial needs. It is a matter of our national security and economic security. The American satellite industry has been a technological wonder and the envy of the world. If we impair the ability of these industries to compete, we have only ourselves to blame. We need this legislation.

**H.R. 4399 assures commercial access to space as follows:**

First. Following the policy precedent for launches of the space shuttle, the bill provides for a risk allocation scheme among launch providers, users and Government that apportions risks fairly and ensures the ability of the United States to meet its obligations to the international community under treaty.

Second. It provides important ground rules for commercial use of Government launch ranges. Commercial users will be charged Government launch costs on a direct, or additive cost basis, reflecting the actual charges of services. Government agencies will also be able to be reimbursed for quality control activities provided at the request of a launch vehicle manufacturer. Finally, and most importantly, the bill will prohibit Government preemption of commercial launches, except in cases of imperative national need which could encompass exigent civilian or national requirements. This will ensure the reliable access to Government ranges by the commercial sector, a variable as important as cost in the selection of launch

services. We are also directing DOT to conduct a study in conjunction with NASA, DOD, and industry to review means of optimizing use of Government ranges for Government and commercial users.

Third. The bill provides incentives for customers under contract with NASA—and whose satellites were under construction at the time of the President's policy decision banning commercial use of the shuttle—to be available if they choose to launch on American launch vehicles. These incentives are not direct subsidies. They were services provided in connection with shuttle launches, and we are simply extending their application in connection with commercial launches, under the legislation.

Fourth. The bill addressed the long-term competitiveness of the launch industry by ensuring continued research and development in launch vehicle component technologies. We want to make sure that the NASA aeronautics model which has done so much to ensure the success of the U.S. aviation industry, is applied at an early stage to the launch sector. These research and development activities should accrue to the benefit of the Government and commercial sectors.

Fifth. In recognition of the international nature of commercial space competitions, the bill expresses the sense of the Congress that the United States should enter into a formal dialog with appropriate foreign governments with a view toward developing Western policies in international launch and satellite servicing competitions.

Finally, I want to comment on the administration's views on this legislation. We have made every effort to include the agencies involved in commercial space transportation—DOT, NASA, and the Air Force—in the deliberations on this important legislation. We received testimony from each agency twice on the bill. In February, the administration announced its own proposal for dealing with insurance and liability problems in the commercial launch industry. Consistent with their tort reform proposals of the last 8 years, they recommended a limitation of \$200,000 on noneconomic damage awards to individual third parties. Also consistent would be congressional reaction to such a proposal. Such a proposal was a clear non-starter. The committee decided instead on the tried and true shuttle policy precedents for allocating risks associated with launch activities conducted by the private sector. I believe the committee's recommendations are much more closely aligned with our international treaty obligations and established Government policies.

Our recommendations in the Government property area are more closely aligned with the administration's recommendations to waive the Government's rights to recover for damages to Government property in excess of

insurance obtained by commercial launch providers at the direction of the Department of Transportation. The committee has followed this recommendation, but has added even greater certainty by setting a \$100 million insurance requirement guideline. Based on our review of Government exposure as a result of property damage from launch accidents, the \$100 million coverage is more than adequate.

Mr. Speaker, this is a good bill. It has been thoroughly debated, and developed in consultation with the launch and satellite industries and representatives of the administration. A counterpart bill, S. 2395, is making its way through the Senate. We are hopeful that enactment will occur in the near future, and that the Nation's first commercial launches will take place early in 1989.

I urge adoption of H.R. 4399.

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The SPEAKER pro tempore (Mr. MONTGOMERY). The gentleman from Florida [Mr. NELSON] has consumed 10 minutes.

Mr. LUJAN. Mr. Speaker, I yield such time as he may consume to the gentleman from Pennsylvania [Mr. WALKER].

Mr. WALKER. I thank the gentleman for yielding.

Let me thank the gentleman from New Jersey [Mr. ROE], the chairman of the full committee, the gentleman from New Mexico [Mr. LUJAN], the vice chairman of the committee, and the chairman of the subcommittee for all the work that has gone in on this bill. I think we have an excellent bill here. It is one that I thoroughly support.

This legislation, in my opinion, is absolutely critical in establishing a viable domestic space launch industry using American expendable launch vehicles.

Since the tragic loss of the space shuttle *Challenger* on January 28, 1986, the policies of the U.S. Government have clearly recognized a commercial launch industry as an essential component of our national space recovery effort, and a critical element of assured access to space by both the Government and commercial sectors.

Both public law, and sound public policy, dictate that the U.S. Government will continue to be an active partner with our domestic launch service providers. This partnership is based on the governmental role of regulator of the industry, owner and manager of the eastern and western launch ranges, provider of critical range services such as weather and range safety, and as the signatory of the international treaty which confers upon the United States absolute liability for damages resulting from accidents involving space vehicles launched from U.S. territory.

Today we stand at the brink of a new era in space commercialization.

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The U.S. commercial space launch industry is rapidly entering a highly competitive international marketplace to provide space launch services.

Our committee it seems to me has done an excellent job of balancing the critical need to ensure a domestic commercial launch industry, and finding ways to allocate the risks so that no single sector is unfairly penalized.

As the ranking Republican of the Subcommittee on Space Science and Applications I must say that I am surprised even shocked that the administration is opposed to this bill in its present form. But let me explain why we are in this position, and let me also assure Members that the opposition is not unanimous.

The Department of Justice does not support our approach to indemnification for damages resulting from accidents. I will admit, that the administration position is consistent—they want to address this problem through tort reform legislation that would thoroughly overhaul our Federal tort system.

The idea is great but it simply is not going to fly in this Congress right now. If I had any thought that there was a chance of passing in this House, in this Congress, such legislation, I would be willing to support an effort to attempt to get that comprehensive tort reform package.

But the truth is that tort reform is a dead issue in this Congress and unless we are willing to have our domestic commercial launch industry also be equally dead, we had better find another way to address the problem.

The Department of Commerce is upset because we are assisting a small group of satellite launchers and claim that this is an unwarranted Federal subsidy. The truth is that there were 44 firm commitments for commercial launches aboard the space shuttle when the *Challenger* was lost. The administration has adopted a policy that reneged on those contracts between U.S. companies and their Government for launches. We recognize that the U.S. Government has broken a contractual obligation with these firms, for the good of the Government, and that in equity, we should act as the Government to mitigate their losses.

The bill provides for a cross waiver of damages resulting from accidents which are not the result of the willful misconduct of the launch company, its contractors, or customers. This is exactly how we handled space shuttle launches, and I was under the distinct impression that this "reciprocal waiver" provision was an essential part of the administration's own space policy that came out only a few months ago.

Mr. Speaker, I generally stand with the administration. I think that Ronald Reagan has been a great President in terms of our space program. And most of his decisions on space have been first rate. But on this issue the administration is just plain wrong.

This bill is one of the best crafted pieces of legislation that I have ever been associated with.

It has won the support of people like rocket manufacturers, satellite manufacturers, insurance underwriters, and satellite users. In this case we have a vehicle that will launch a new American industry that will continue this Nation in the forefront of the space-faring nations on Earth.

In the alternative, you can adopt the apparent administration position and you can hold this infant industry now emerging hostage for comprehensive tort reform legislation. The result should be obvious. Tort reform is an issue that has been dead-on-arrival on Capitol Hill. That is a shame, but that is a fact. That is not going to change the basic fact that we are not going to get tort reform. The result will be that our domestic commercial launch industry will die aborning.

Mr. Speaker, I think that we have a choice before us today which is a clear one. You can vote for this bill and be in the forefront of a new commercial launch industry, we can vote against this bill with the administration's objections and hold that industry hostage. I think we would make a mistake to do that. The right thing to do is to pass this legislation and move ahead with what this Nation's space program needs.

I thank the gentleman for yielding.

Mr. VALENTINE. Mr. Speaker, H.R. 4399 is an important piece of legislation that will be essential to the recovery of our space program following the *Challenger* accident. We have learned a painful lesson that our shuttle program must be accompanied by a strong and healthy expendable launch vehicle industry. The Government and the private sector are partners and we share a national responsibility to provide access to space for our scientific, defense, and commercial satellites.

This bill accomplishes a major objective, in recognition of this partnership, by establishing an equitable risk-sharing mechanism and in providing the certainty needed by the private sector to assess the extent of liability exposure. These are critical elements in any business of launching satellites.

Under the provision contained in this bill the launching party would indemnify itself and the Federal Government against all losses up to the maximum probable loss or \$500 million, whichever is less. The Government would pay for any claims exceeding this. We envision that, on balance, the Government will benefit by avoiding claims for the numerous minor mishaps that will provide the industry with confidence that they are not exposed to unlimited liability. Although such major accidents that would exceed the maximum probable loss or \$500 million are exceedingly unlikely, this confidence is absolutely essential if any private firm is to stay in business. Moreover, the United States is already fully responsible under the outer space treaty and liability convention for activities conducted by U.S. citizens in space. The risk-sharing relationship is responsible to the international community. Thus, this bill strikes a compromise that benefits both the Government and the private sector.

...to join me in support...

Mr. ROSELLA. Mr. Speaker, there are two issues here. How to make amends to companies affected for shuttle flights following 51 L, the tragic *Challenger* accident on January 28, 1986, and how to set the course for future commercial space launching. The first is simply a question of equity—of the U.S. Government delivering on a promise. Testimony given to a Science, Space and Technology Subcommittee in February by the president of an off-loaded company which had a firm launch date from NASA in 1987 and, following the disaster, an assurance that the obligation would be honored, clearly demonstrates the need to recognize the difference between manifested companies and companies seeking contracts. Countless hours have been spent in negotiating a fair compensation, and all indications are that the language in the bill is an equitable solution.

Setting the course for future commercial launching is, of course, more involved. I must again point out that literally hundreds of hours have been spent by Members and staff—and special thanks must be given to an incredibly dedicated and knowledgeable staff for the Space Science and Applications Subcommittee. Since our first informal exchange of information in November of last year with the presidents of America's largest space risk underwriters and the largest space insurance brokers, through the remarkable endorsement by virtually every industry in the launching, satellite and insurance business, this bill has been "on a go." Because of its widespread support and the careful way it has been crafted, it is an essential ingredient toward re-instating American leadership in space.

In general terms, H.R. 4399 gives industry the firm commitment to launch it needs to make necessary business decisions. It will help to keep the launching industry in the United States, despite some very real competition from the Europeans, Japanese, Chinese, and the Soviet Union. It needs to be passed today, not tomorrow or the next, and it needs to have the overwhelming support of Congress, as it does from the American public.

Mr. LUJAN. Mr. Speaker, I have no further requests for time, and I yield back the balance of my time.

Mr. ROE. Mr. Speaker, I have no further requests for time, and I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from New Jersey [Mr. ROE] that the House suspend the rules and pass the bill, H.R. 4399.

The question was taken; and (two-thirds having voted in favor thereof), the rules were suspended and the bill was passed.

A motion to reconsider was laid on the table.

## GENERAL LEAVE

Mr. ROE. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to revise and extend their remarks on H.R. 4399, the bill just passed.